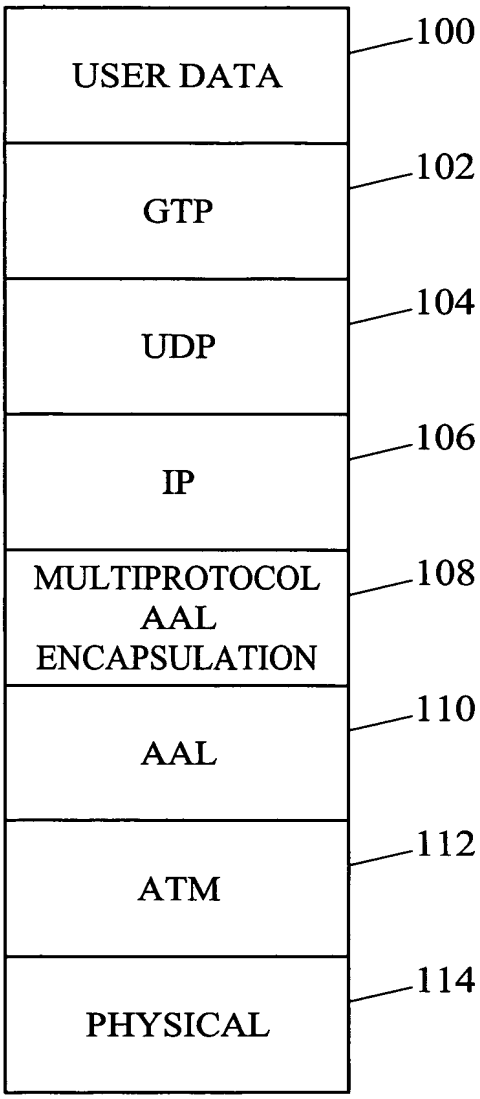


FIG. 1
(PRIOR ART)

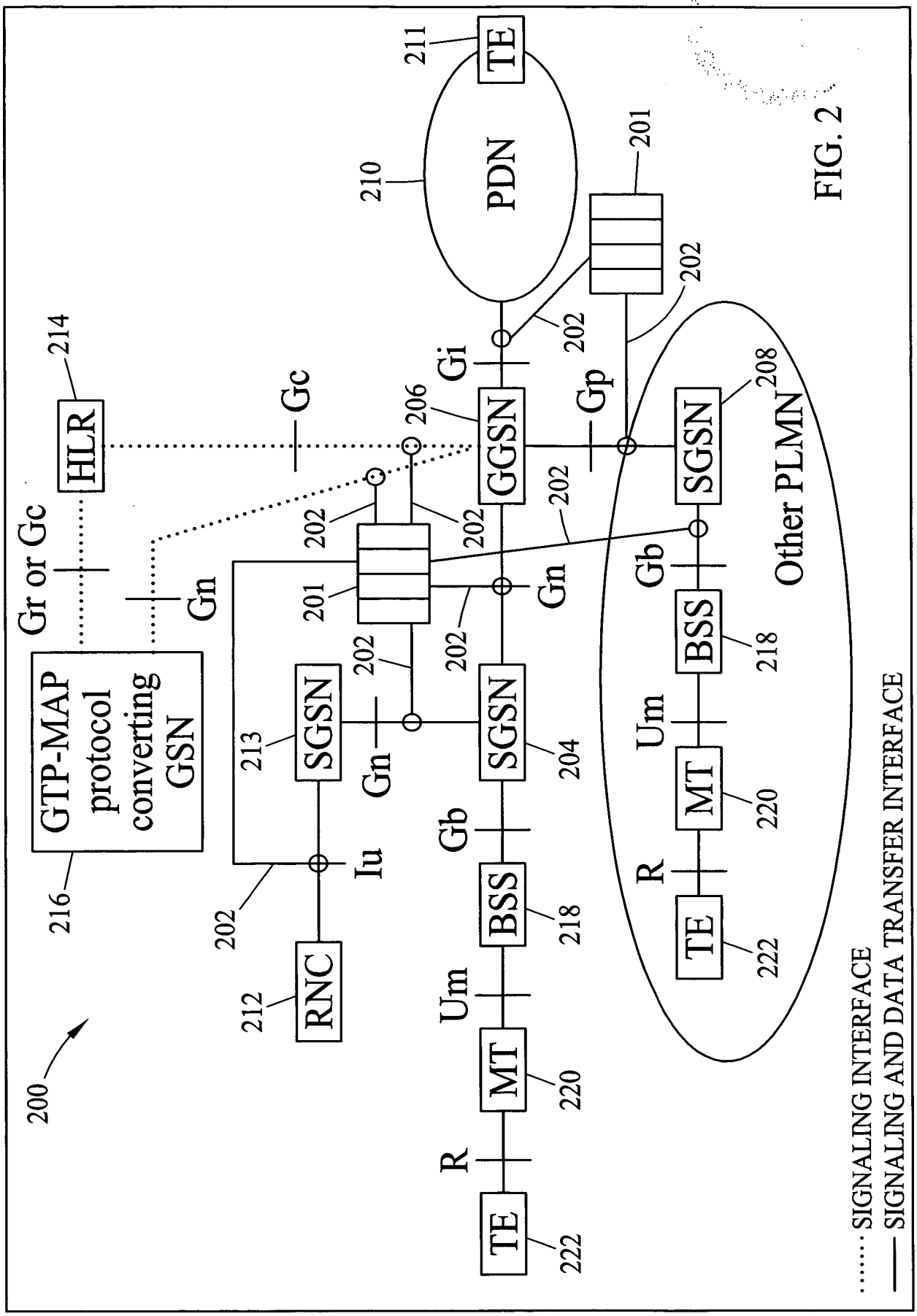

200
HLR
214
Gc
Gr or Gc
Gn
GTP-MAP protocol converting GSN
216
PDN
210
TE
211
Gi
GGSN
206
Gp
SGSN
208
Other PLMN
Gb
BSS
218
Um
MT
220
R
TE
222
SGSN
213
Gn
Iu
RNC
212
SGSN
204
201
202
SIGNALING INTERFACE
SIGNALING AND DATA TRANSFER INTERFACE

FIG. 2

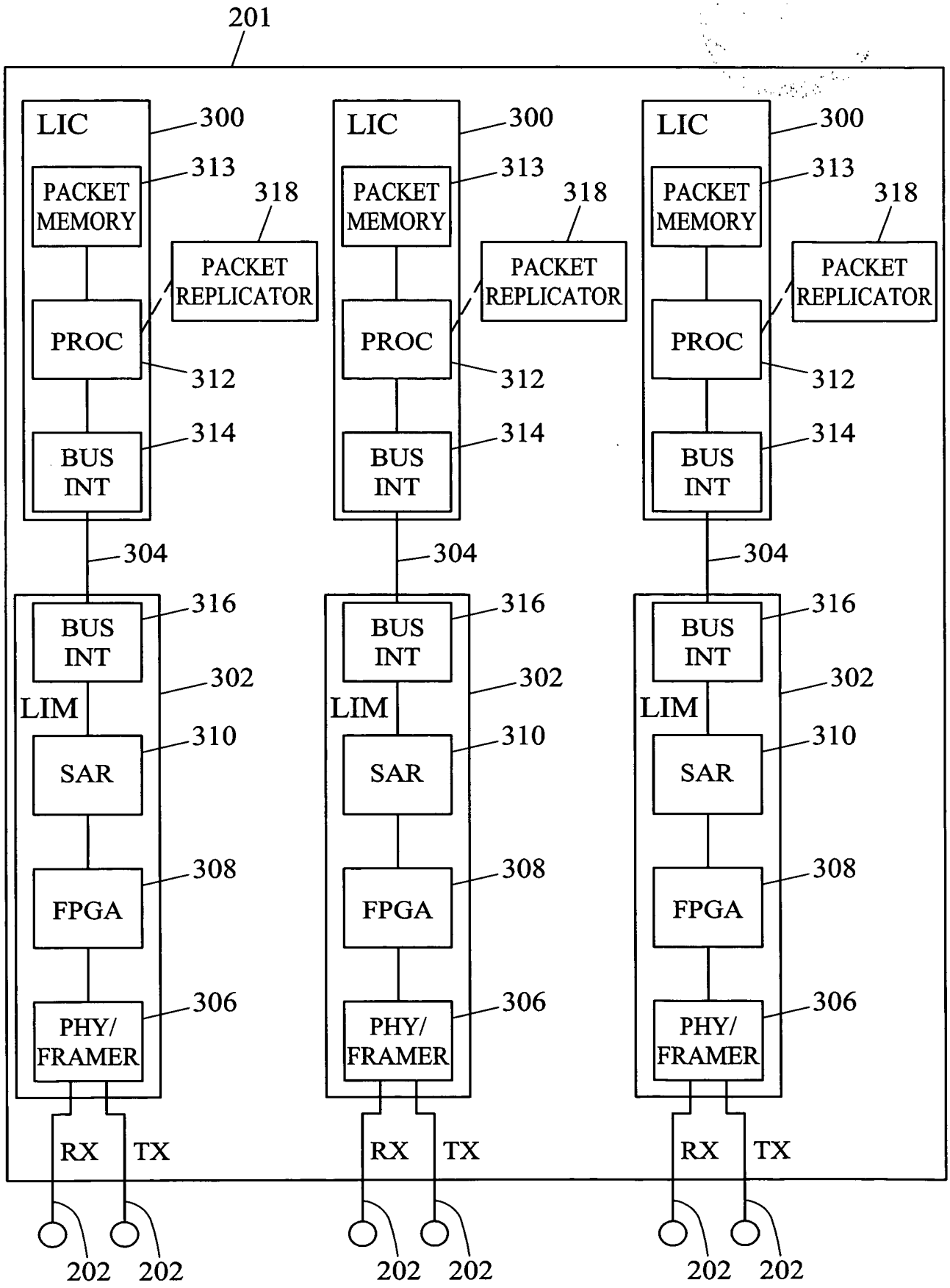

201
LIC
300
PACKET MEMORY
313
318
PACKET REPLICATOR
PROC
312
BUS INT
314
304
BUS INT
316
LIM
302
SAR
310
FPGA
308
PHY/ FRAMER
306
RX
TX
202
202

FIG. 3

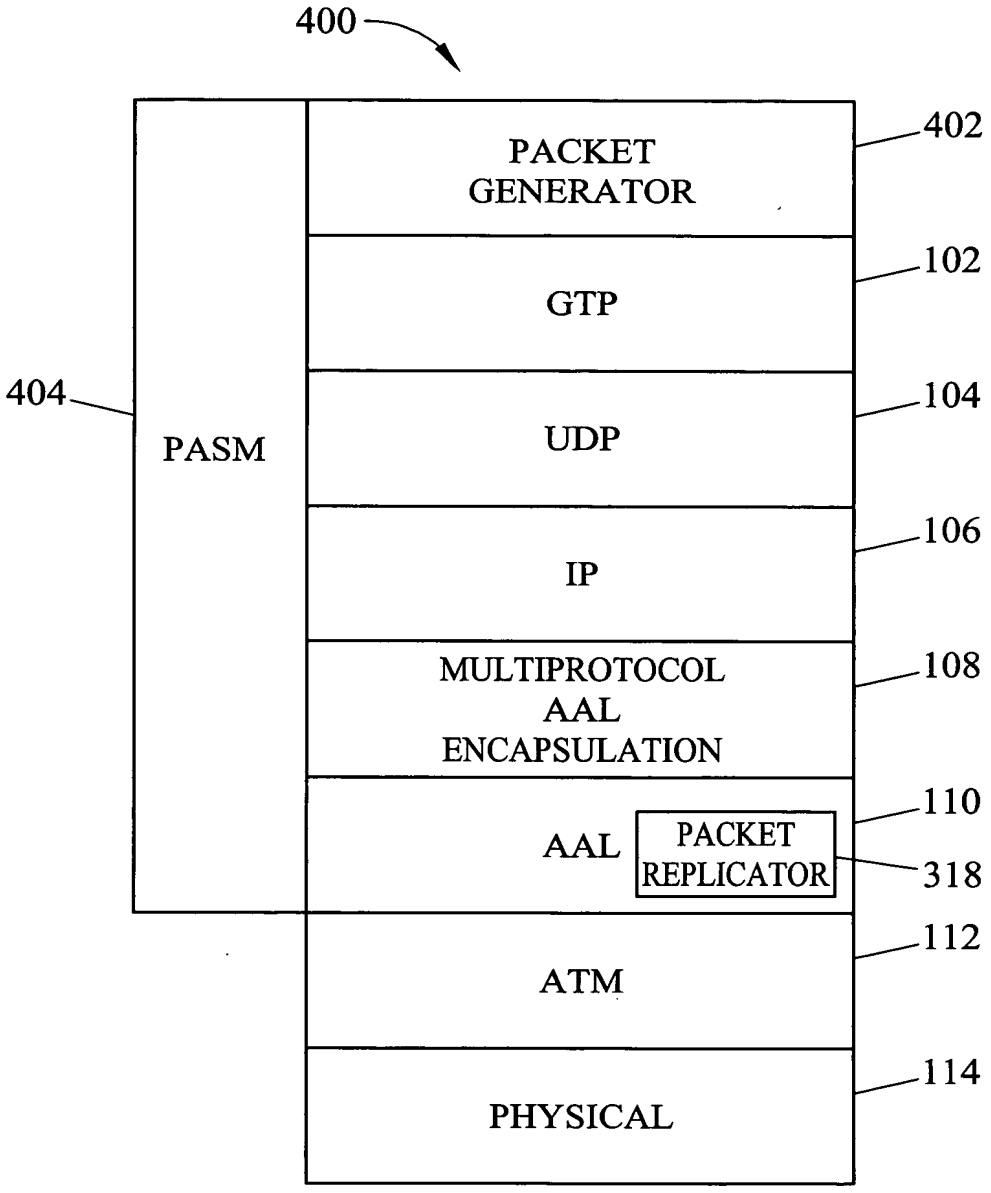

400
PACKET GENERATOR
402
GTP
102
404
PASM
UDP
104
IP
106
MULTIPROTOCOL AAL ENCAPSULATION
108
AAL
PACKET REPLICATOR
110
318
ATM
112
PHYSICAL
114

FIG. 4

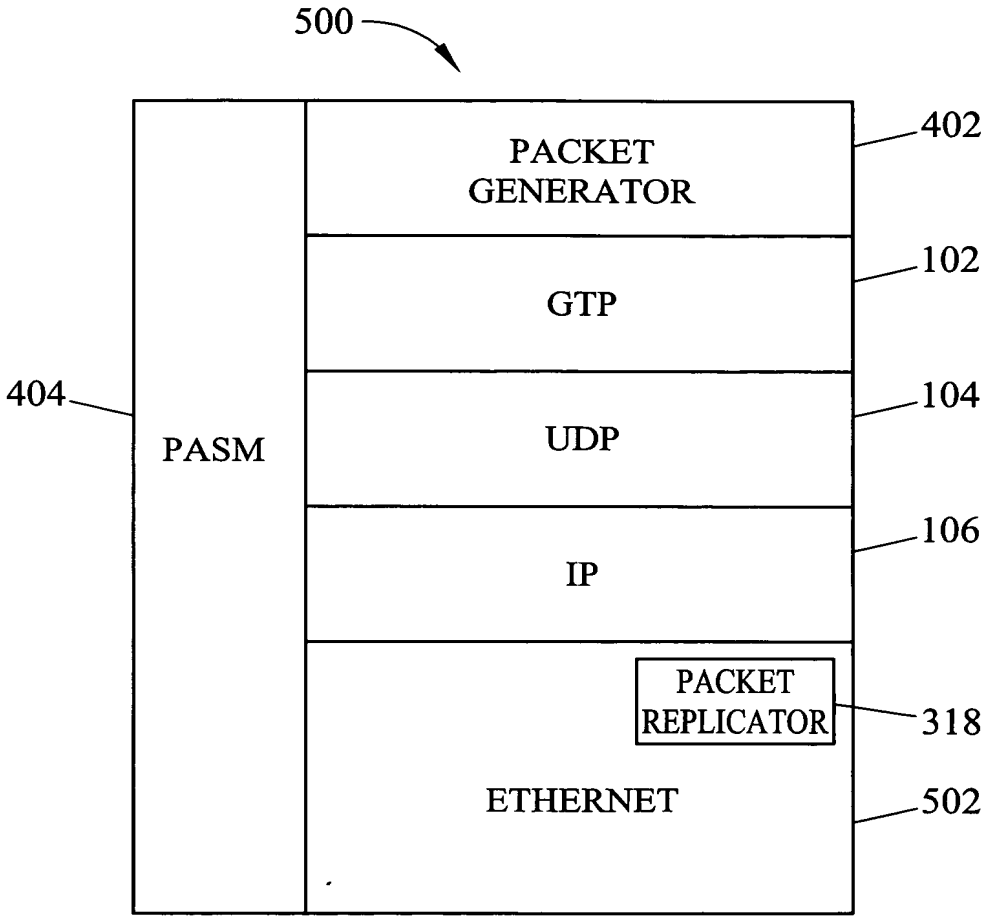

500
PACKET GENERATOR
402
GTP
102
404
PASM
UDP
104
IP
106
PACKET REPLICATOR
318
ETHERNET
502

FIG. 5

600

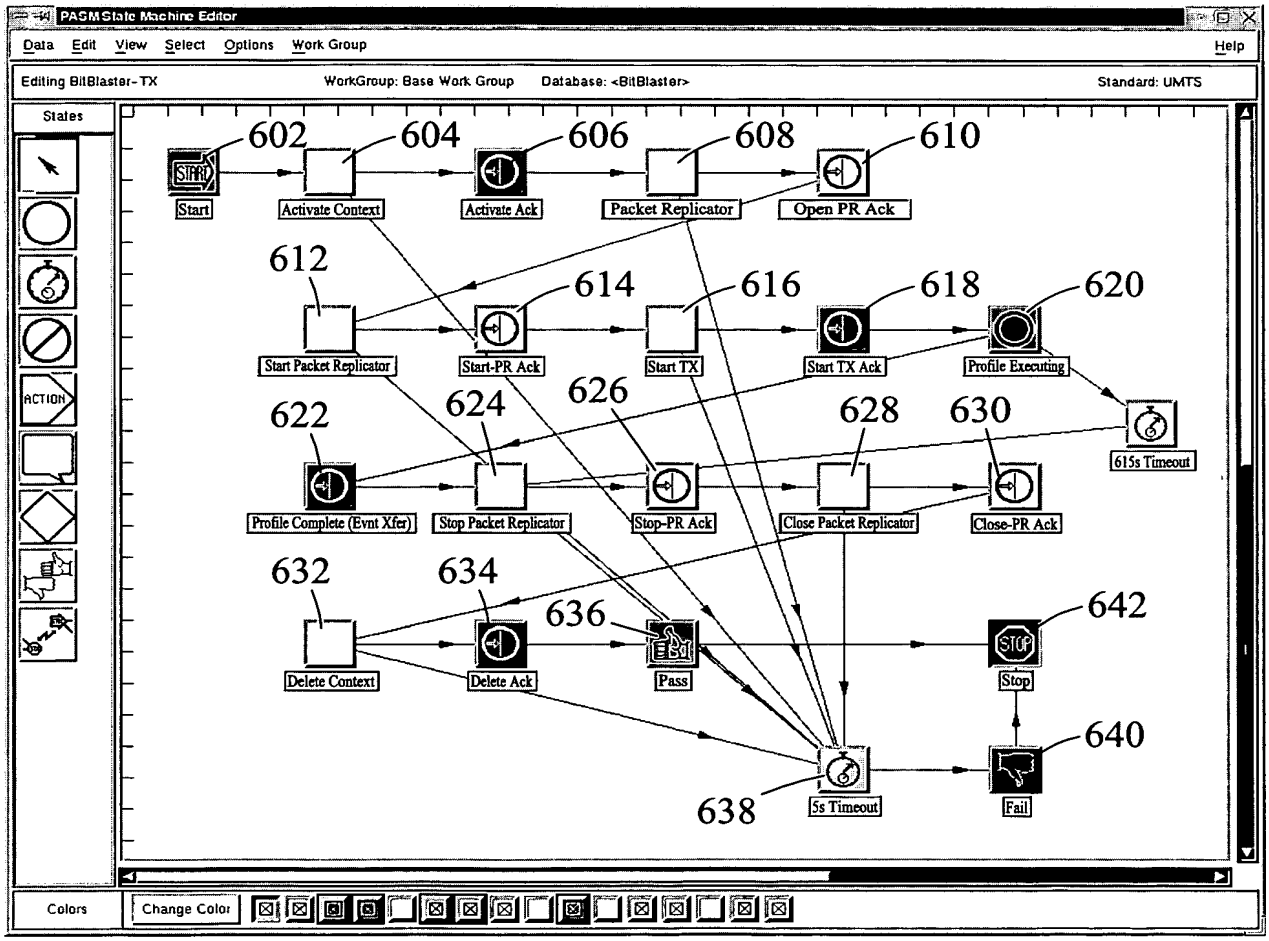
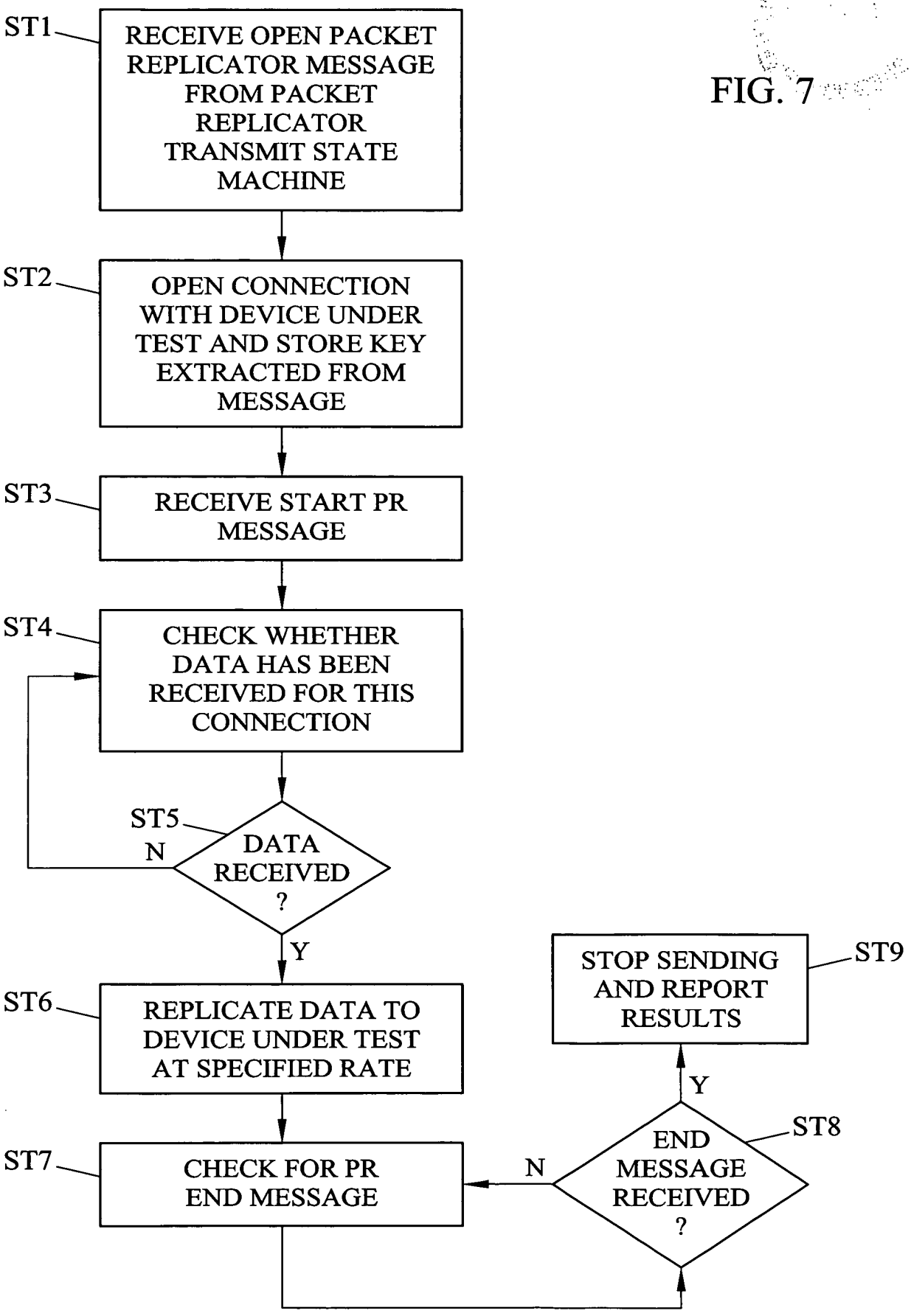

PASM State Machine Editor
Data Edit View Select Options Work Group Help
Editing BitBlaster-TX
WorkGroup: Base Work Group
Database: <BitBlaster>
Standard: UMTS
States
ACTION
Colors
Change Color
602
604
606
608
610
612
614
616
618
620
622
624
626
628
630
632
634
636
638
640
642
Start
Activate Context
Activate Ack
Packet Replicator
Open PR Ack
Start Packet Replicator
Start-PR Ack
Start TX
Start TX Ack
Profile Executing
615s Timeout
Profile Complete (Evnt Xfer)
Stop Packet Replicator
Stop-PR Ack
Close Packet Replicator
Close-PR Ack
Delete Context
Delete Ack
Pass
Stop
5s Timeout
Fail

FIG. 6

FIG. 7


ST1
RECEIVE OPEN PACKET REPLICATOR MESSAGE FROM PACKET REPLICATOR TRANSMIT STATE MACHINE
ST2
OPEN CONNECTION WITH DEVICE UNDER TEST AND STORE KEY EXTRACTED FROM MESSAGE
ST3
RECEIVE START PR MESSAGE
ST4
CHECK WHETHER DATA HAS BEEN RECEIVED FOR THIS CONNECTION
ST5
DATA RECEIVED ?
N
Y
ST6
REPLICATE DATA TO DEVICE UNDER TEST AT SPECIFIED RATE
ST7
CHECK FOR PR END MESSAGE
ST8
END MESSAGE RECEIVED ?
N
Y
ST9
STOP SENDING AND REPORT RESULTS

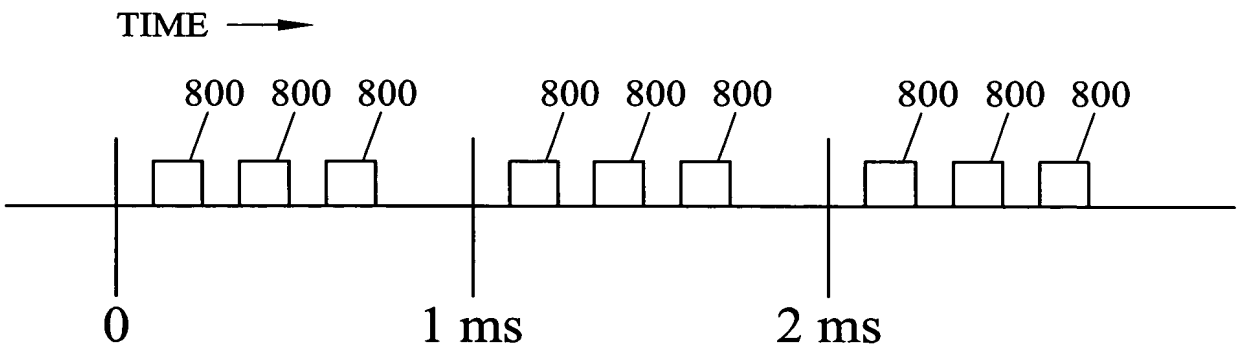


FIG. 8

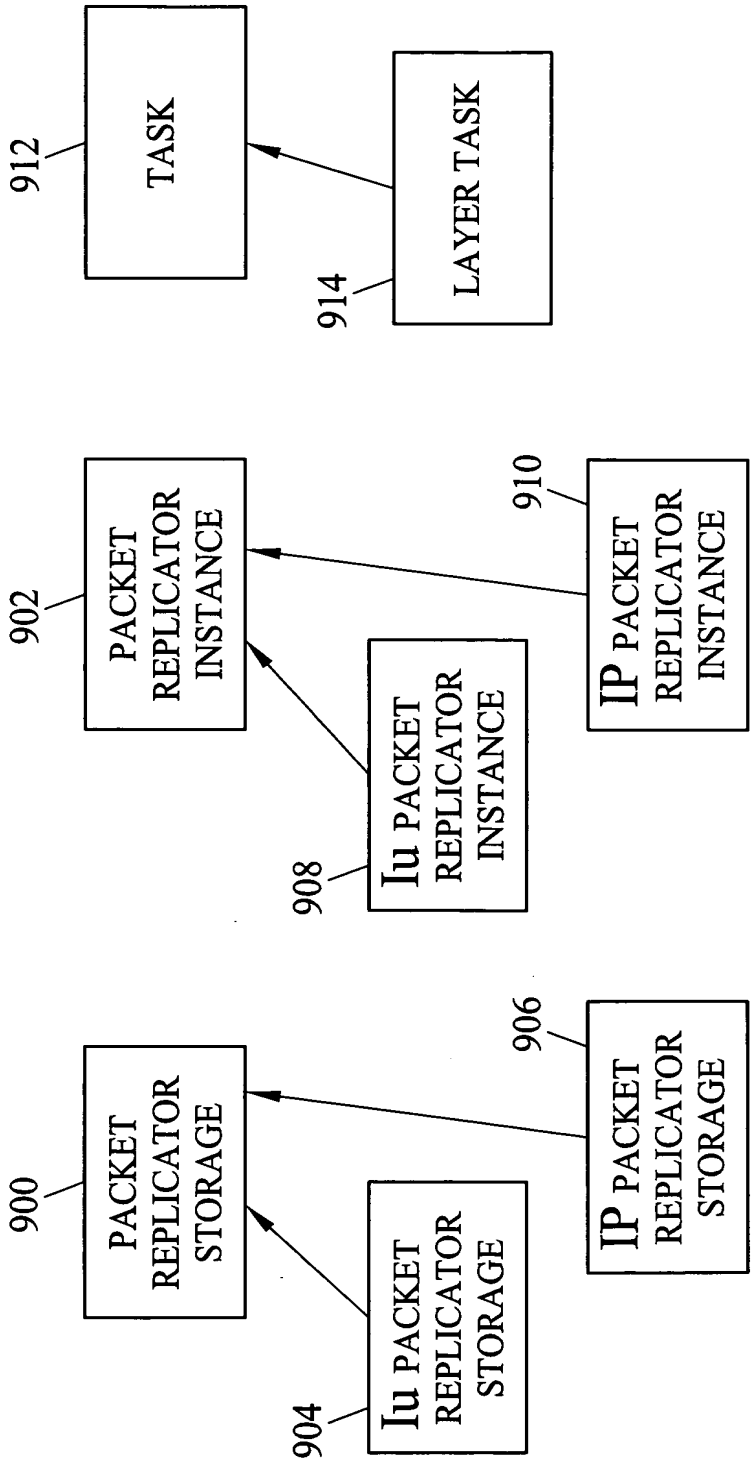

912
TASK
914
LAYER TASK
902
PACKET REPLICATOR INSTANCE
908
Iu PACKET REPLICATOR INSTANCE
910
IP PACKET REPLICATOR INSTANCE
900
PACKET REPLICATOR STORAGE
904
Iu PACKET REPLICATOR STORAGE
906
IP PACKET REPLICATOR STORAGE

FIG. 9